

# Parental Control, Child Disclosure, and Reactive and Proactive Aggression Among Hong Kong Chinese Adolescents

## Abstract

Adolescent aggression is shaped by family processes, yet limited research has examined how parental control and adolescents' voluntary disclosure relate to reactive and proactive aggression in Chinese contexts. This cross-sectional study examined associations among maternal and paternal behavioral control, child disclosure, aggression, and related behavioral outcomes among 3,806 Hong Kong secondary school students aged 11–18 years and 5,482 biological parents. Adolescents completed the Reactive-Proactive Aggression Questionnaire and selected youth self-report behavioral subscales assessing aggressive behavior, delinquency, anxiety/depression, and attention problems, whereas parents reported on behavioral control and child disclosure. Parental control showed small but significant negative associations with proactive aggression, aggressive behavior, and delinquent behavior. Child disclosure to both mothers and fathers was consistently associated with lower levels of adolescent behavioral problems, including aggression, delinquency, and attention problems. Gender-stratified analyses suggested that these associations varied by parent and adolescent gender, with particularly consistent protective associations for girls' disclosure to parents. Boys reported higher proactive aggression and delinquent behavior, whereas girls reported higher anxiety/depression symptoms. These findings suggest that adolescent disclosure may be a particularly important family communication process linked to lower behavioral risk. Parenting and school-based interventions in Hong Kong may benefit from strengthening open parent-child communication while considering gendered family dynamics.

**Keywords:** adolescent aggression, parental control, child disclosure, Hong Kong adolescents, parent-child communication

## Highlights

- Parental control was negatively associated with proactive aggression and delinquency.
- Child disclosure showed consistent protective associations with behavioral problems.
- Disclosure to parents was especially relevant for girls' behavioral outcomes.
- Boys reported higher proactive aggression and delinquent behavior than girls.

## Introduction

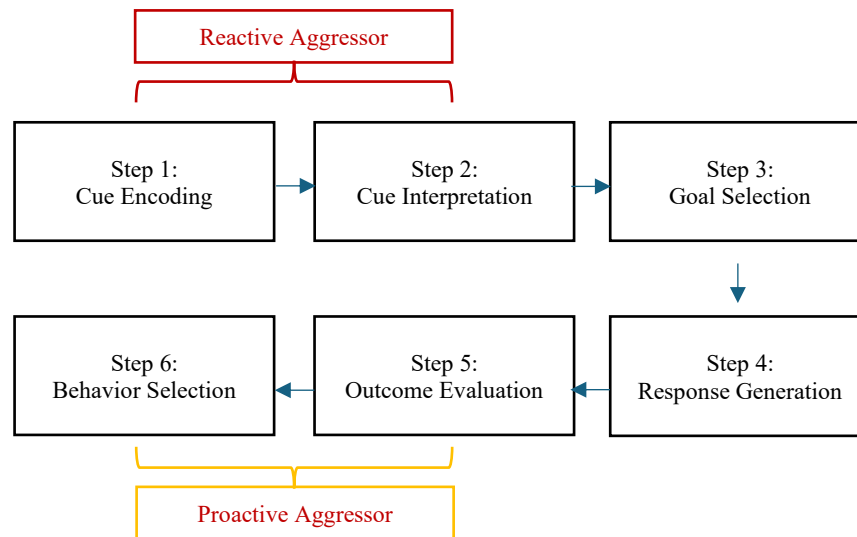
Aggression among adolescents is a multifaceted behavioral issue that has received significant attention in developmental psychology due to its long-term psychosocial consequences. Aggression is often categorized into reactive (impulsive and emotionally driven) and proactive (planned and goal-oriented) subtypes. The manifestation of aggression is influenced by individual, familial, and cultural factors (Raine et al., 2006). Although much attention has been paid to how parenting style affects an individual's development, it is critical to understand the interplay between parental dynamics, such as parental control and child disclosure, and adolescent aggression. This study aimed to comprehensively examine the relationships among reactive and proactive aggression, parental roles, child disclosure, and sex differences in behavioral outcomes. To date, no study has systematically investigated the interplay between these variables. Therefore, this study represents the first attempt to provide an integrated analysis in this context.

### Reactive and Proactive Aggression in Adolescence

Aggression during adolescence is a significant concern worldwide, including in Hong Kong. Longitudinal data show that these aggressive behaviors tend to increase in early- to mid-adolescence (around 13–15 years) then taper off by late adolescence (around 16–17 years; Vaughan et al., 2023). Indeed, one study noted that aggression in boys peaked around the age of 15 (Fung, 2019). Notably, the particularly high prevalence of aggression, such as peer bullying, is a serious concern in Hong Kong. According to the Programme for International Student Assessment (PISA), Hong Kong ranked the worst for school bullying among 72 countries and regions in 2015, and despite the severity had slightly declined by 2022, approximately 35% of adolescents in Hong Kong still reported experiencing bullying at least a few times a month (OECD, 2015; 2023). This persistent problem is concerning, as adolescents who display aggression are more likely to have criminal records in adulthood if the behavior continues unchecked (Tiiri et al., 2023). Therefore, understanding the nature of adolescent aggression in Hong Kong is critical.

The literature has long recognized that not all aggression is the same. Dodge and Coie (1987) first differentiated two subtypes based on their underlying purposes, namely reactive and proactive aggression. “Reactive aggression” refers to impulsive, emotionally driven responses to perceived provocation, threat, or frustration. It is typically defensive and is often accompanied by anger, heightened emotional arousal, and difficulty regulating emotion. In contrast, proactive aggression is deliberate, goal-directed, and unemotional. It involves the planned use of aggression to achieve desired outcomes, such as social dominance, material gain, or peer status. Both subtypes of aggression can be understood through the social information processing (SIP) model, which highlights the differences between these two subtypes (Crick & Dodge, 1994). According to this model, individuals navigate social situations through a sequence of mental steps, including encoding cues, interpreting cues, selecting and clarifying goals, generating responses, evaluating outcomes, and selecting a behavior. In the case of RA, difficulties primarily arise during the cue encoding and interpreting phases (Figure 1). Adolescents who exhibit RA are likely to focus on ambiguous

cues and misinterpret them as threatening or hostile. This misinterpretation then triggers emotional arousal and defensive aggression, even in the absence of an actual threat. In contrast, PA follows a different pattern in the SIP framework. Adolescents displaying PA do not necessarily misinterpret social cues; rather, they generate and select aggressive responses because they view these behaviors as instrumental in achieving their goals (i.e., evaluating outcomes). Their cognitive processing is more calculated and oriented toward maximizing personal gain, with less involvement of emotional dysregulation.



**Figure 1.** *Reactive and Proactive Aggression in the Social Information Processing Model*

While RA and PA are theoretically distinct, both forms of aggression develop within broader family contexts. Specifically, parental control and child disclosure may help explain how these aggression subtypes are expressed during adolescence. Parental control reflects parents' efforts to regulate adolescents' activities through rules, supervision, and behavioral expectations, whereas child disclosure refers to adolescents' voluntary sharing of information about their peer relationships, daily activities, and emotional experiences. Together, these constructs may shape parental knowledge, opportunities for behavioral regulation, and the quality of parent–child communication. Their associations with adolescent outcomes may further vary by sex, as boys and girls often differ in patterns of aggression, delinquency, emotional symptoms, and disclosure to parents. Therefore, examining RA and PA alongside parental control, child disclosure, and sex differences may provide a more nuanced account of how distinct forms of aggression are embedded within family and gendered developmental contexts.

### **Parental Control, Child Disclosure, and Adolescent Aggression**

Parental control is closely related to adolescent aggression and behavioral adjustment. Such behavioral regulations may limit adolescents' opportunities to engage in rule-breaking or instrumental aggression and may also increase parents' awareness of adolescents' peer activities and daily routines. Previous research has shown that parental monitoring and behavioral control are associated with lower levels of adolescent delinquency and antisocial

behavior (Hoeve et al., 2009; Stattin & Kerr, 2000). In Chinese samples, parenting practices have also been linked to adolescent aggression and aggression subtypes, including RA and PA (Gao et al., 2014; Xu et al., 2009). These findings suggest that parental control may be particularly relevant to forms of aggression and behavioral problems that involve rule-breaking, planning, or goal-directed behavior, such as PA, aggressive behavior, and delinquent behavior. Therefore, examining maternal and paternal behavioral control may help clarify how parent-driven regulation is associated with adolescent aggression and related behavioral outcomes.

On the other hand, child disclosure provides a related but distinct pathway through which parents obtain knowledge about adolescents' lives. Unlike parental control, which is initiated by parents, disclosure depends on adolescents' willingness to voluntarily share information about their activities, peer relationships, and experiences. Previous research has shown that higher levels of child disclosure are associated with fewer internalizing and externalizing problems. For example, Hoeve et al. (2009) reported that adolescents' willingness to disclose details of their activities to their parents was linked to substantially lower levels of aggressive behavior and delinquent. Longitudinal studies have similarly found that disclosure, particularly when combined with supportive parenting, predicts declines in depressive symptoms over time (Micalizzi et al., 2018; Rodríguez-Ruiz et al., 2023). Conversely, when parents rely primarily on surveillance or excessive control without fostering a trusting relationship, adolescents may withhold information, thereby weakening parental influence (Willoughby & Hamza, 2010). These findings suggest that parental control and child disclosure are related but distinct family processes. Examining both constructs is therefore important for understanding adolescent aggression, because family regulation and voluntary communication may be associated with different forms of behavioral adjustment, including reactive aggression, proactive aggression, and delinquent behavior.

### **Sex Difference, Parent-Child Dynamics, and Behavioral Outcomes**

While parental control and child disclosure are important family processes in adolescent aggression, sex differences add another layer of complexity because these processes may vary across boys and girls and across mother-child and father-child relationships. To illustrate, boys generally show more delinquency and attention problems, whereas girls show higher internalizing distress, including depressive and anxiety symptoms, by mid-adolescence (Chan, 2021). In a large Hong Kong school sample, boys scored higher on proactive aggression and peer victimization, whereas girls showed relatively higher reactive aggression once proactive aggression was controlled (Fung, 2021).

Importantly, these sex differences unfold within family relationships. A meta-analysis of 43 studies found that Chinese adolescents generally perceive maternal parenting more positively than paternal parenting, suggesting that mothers and fathers may play different roles in daily caregiving, supervision, and relationship maintenance (Dou et al., 2020). Mothering and fathering are therefore not interchangeable. For example, positive relationships with both parents predicted fewer depressive symptoms in girls, whereas for boys the unique protective effect was paternal (Zhang et al., 2015). Parental knowledge also

depends on adolescents' willingness to disclose, as child disclosure predicts parental knowledge more strongly than most parent-driven strategies, second only to parental warmth (Liu et al., 2004). Consistent with this, adolescents tend to communicate more easily with mothers than fathers, and girls generally disclose more than boys (Shek, 2006).

These dyadic patterns are also relevant to aggression. Longitudinal evidence suggests that maternal and paternal monitoring may relate differently to adolescent aggression, with higher maternal monitoring predicting lower aggression within families, whereas paternal monitoring shows a different pattern among boys in mid-adolescence (Yang et al., 2022). Furthermore, empirical evidence suggests that parent–child associations may differ across same- and different-gender dyads. Updegraff et al. (2009) found that mothers spent more time with daughters than sons, and that parent–adolescent relationship qualities were associated with adolescent adjustment differently by adolescent gender. In a large Chinese sample, Zhang et al. (2022) reported that positive mother–adolescent relationships predicted fewer depressive symptoms among girls, whereas positive father–adolescent relationships showed a unique protective association among boys. These findings suggest that maternal parenting processes may be particularly relevant for girls, whereas paternal parenting processes may be particularly relevant for boys. Thus, mother–daughter and father–son dyads may be especially important when examining how parental control and child disclosure are associated with adolescent aggression and behavioral outcomes. Examining adolescent sex together with maternal and paternal control and child disclosure is therefore important for understanding how family processes are associated with reactive aggression and proactive aggression.

## **The Current Study**

Although previous studies have linked parenting processes to adolescent aggression and behavioral outcomes, several gaps remain. First, much of the literature has examined parental control, monitoring, or parenting style broadly, without clearly distinguishing parent-driven behavioral regulation from adolescent-driven disclosure. This distinction is important because parental control and child disclosure may reflect different routes through which parents gain knowledge and influence adolescent behavior. Second, studies of adolescent aggression have not always distinguished reactive aggression from proactive aggression, despite evidence that these subtypes differ in their social-cognitive and motivational features. Third, relatively limited research has examined maternal and paternal processes separately while also considering adolescent sex, as parent gender and adolescent sex may shape parental control, child disclosure, and their associations with adolescent behavioral outcomes.

To address these gaps, the present study examined the associations among parental control, child disclosure, reactive aggression, proactive aggression, and related behavioral outcomes in a sample of Hong Kong adolescents and their biological parents. Maternal and paternal control and disclosure were examined separately, and sex-stratified analyses were conducted to explore whether these associations differed between boys and girls. By integrating aggression subtypes, parental control, child disclosure, and sex differences, this

study aimed to provide a more nuanced understanding of how family processes are associated with adolescent behavioral health in Hong Kong.

## **Hypotheses**

### **Hypothesis 1:**

Higher levels of maternal and paternal control are negatively associated with adolescent proactive aggression, aggressive behavior, and delinquent behavior, with stronger associations observed between mothers and daughters and between fathers and sons.

### **Hypothesis 2:**

Higher levels of child disclosure to both mothers and fathers are negatively associated with adolescent reactive aggression, proactive aggression, aggressive behavior, delinquent behavior, attention problems, and anxiety and depression symptoms, with stronger associations observed between mothers and daughters and between fathers and sons.

### **Hypothesis 3:**

Male adolescents show higher levels of proactive aggression, attention problems, and delinquent behavior than female adolescents, whereas female adolescents show higher levels anxious/depressed symptoms than male adolescents.

## **Method**

### **Participants**

A total of 3,806 adolescents (1,925 boys and 1,881 girls), aged from 11 to 18 years ( $M = 13.2$  years;  $SD = 1.18$ ), completed a questionnaire survey. The participants were secondary 1 (grade 7) to secondary 3 (grade 9) students in Hong Kong. A total of 5,482 biological parents (3,198 mothers and 2,284 fathers) of the children also completed a questionnaire survey. Previous validation studies have demonstrated that the measure remains valid even with incomplete parental data (Alejandra et al., 2023; Guo et al., 2024). This study adopted a cross-sectional design, in which all of the participants were assessed at a single time point. All of the participants were Chinese.

### **Procedure**

An invitation to participate in the study was sent to all secondary schools in Hong Kong (approximately 800), of which 94 responded positively. Ten schools were randomly selected for participation using clustering sampling. All secondary 1 to secondary 3 students from the 10 selected schools were invited to complete the questionnaire survey. Eligible student participants were Chinese adolescents enrolled in Secondary 1 to Secondary 3 at one of the participating schools. No additional clinical or behavioral screening was conducted before participation, as the study was designed as a school-based survey of adolescent behaviors and family processes. After school agreement was obtained, information about the study was provided to students and their parents. Parental consent was obtained before student participation. Students completed the questionnaire during school time under the arrangement of the participating schools. The student questionnaire assessed reactive and proactive aggression, behavioral and emotional problems, and demographic information.

Parents were invited to complete a separate parent questionnaire assessing parental control and child disclosure. Parent questionnaires were distributed through the participating schools and returned to the research team after completion. Participation was voluntary, and students and parents were informed that the study aimed to understand the behaviors and needs of adolescents in Hong Kong.

## Measures

The student questionnaire consisted of the Reactive–Proactive Aggression Questionnaire (RPQ; Raine et al., 2006), the Child Behavior Checklist–Youth Self-report (CBCL-YSR; Achenbach, 1991), and demographic variables such as age and sex.

**Reactive–Proactive Aggression Questionnaire.** The RPQ (Raine et al., 2006) is a self-report measure of reactive and proactive aggression. The measure consists of 23 behavioral items rated on a 3-point Likert scale ranging from 0 (*never*) to 2 (*often*), including 11 items assessing reactive aggression (e.g., “reacted angrily when provoked by others”) and 12 items assessing proactive aggression (e.g., “hurt others to win a game”). Item scores were summed separately for the reactive and proactive aggression subscales. Possible scores range from 0 to 22 for reactive aggression and from 0 to 24 for proactive aggression, with higher scores indicating higher levels of the respective aggression subtype. The Chinese translation of the RPQ, which has been validated among a sample of adolescents in Hong Kong, was adopted (Fung et al., 2009). In the present sample, the Cronbach’s alpha values were .80 for reactive aggression and .84 for proactive aggression.

**CBCL-YSR.** The CBCL-YSR (Achenbach, 1991) is a self-report measure that has been widely used to assess eight types of internalizing and externalizing problems of young people aged 11 to 18 years. Adolescents rate their own behaviors and emotions at the moment or within the previous 3 months on a 3-point Likert scale ranging from 0 (inaccurate) to 2 (very accurate). No external informants (e.g., parents or teachers) were involved in completing this measure. Four of the eight scales were used in this study, namely Aggressive Behavior (19 items, e.g., “*I destroy things belonging to others*”), Anxiety/Depression (16 items, e.g., “*I cry a lot*”), Delinquent Behavior (11 items, e.g., “*I lie or cheat*”) and Attention Problem (9 items, e.g., “*I have trouble sitting still*”). Item scores were summed to create scale scores. More specifically, the Aggressive Behavior subscale measures the frequency and intensity of aggressive actions, with higher scores indicating more frequent or severe aggressive behavior. The Anxiety/Depression subscale measures the severity of anxiety and depressive symptoms, with higher scores indicating more severe symptoms. The Delinquent Behavior subscale measures the frequency of delinquent actions, with higher scores indicating a higher frequency of delinquent behaviors. Finally, the Attention Problem subscale measures the degree of concentration difficulties, with higher scores indicating greater difficulty with maintaining focus. The minimum possible score for each item is 0 and the maximum is 2. Therefore, the maximum possible score for each subscale is 38 for Aggressive Behavior (19 items), 32 for Anxiety/Depression (16 items), 22 for Delinquent Behavior (11 items), and 18 for Attention Problem (9 items). The total possible score across all subscales is 110. The Chinese version, translated by Leung, Ho, Hung, Lee, and Tang (1998), which has been

validated among Chinese adolescents, was adopted. In the present sample, the Cronbach's alpha values were .85 for Aggressive Behavior, .87 for Anxiety/Depression, .68 for Delinquent Behavior, and .76 for Attention Problem.

**Parental Control and Child Disclosure.** Parental control and child disclosure were assessed using items adapted from Stattin and Kerr's (2000) parental monitoring framework. Using a 5-point Likert scale (0: never; 1: seldom; 2: sometimes; 3: often; and 4: usually), the parents answered a total of 11 items: 6 items on parent control (e.g. "*You demand that you know where your child is in the evenings, who he/she is going to be with, and what he/she is going to do*") and 5 items on child disclosure (e.g. "*Your child spontaneously tells you about his/her friends (which friends he/she hangs out with and how they think and feel about various things)*"). The minimum score for each subscale is 0, with a maximum score of 24 for Parent Control and 20 for Child Disclosure. Higher scores on the Parent Control subscale indicate more frequent or stricter parental control, whereas higher scores on the Child Disclosure subscale indicate that the child is more open in sharing information with their parents. Items were back-translated into Chinese by the author. In the present sample, the Cronbach's alpha values were .87 for Parent Control and .61 for Child Disclosure.

## **Statistical Analyses**

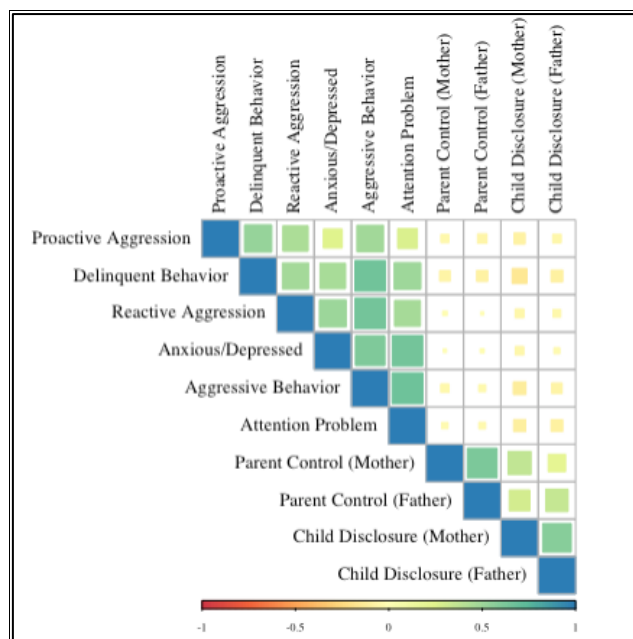
Descriptive statistics, internal consistency coefficients, Pearson correlations, and MANOVA were conducted using IBM SPSS Statistics, version 27. Pearson correlation analyses were used to examine associations among parental control, child disclosure, RA, PA, and adolescent behavioral outcomes. To examine sex differences across multiple adolescent outcomes, a one-way MANOVA was conducted with adolescent sex as the independent variable and RA, PA, aggressive behavior, delinquent behavior, anxious/depressed symptoms, and attention problems as dependent variables. When the multivariate effect was significant, follow-up univariate tests were examined. Sex-stratified correlation analyses were then conducted to examine associations between parenting variables and adolescent outcomes separately among boys and girls. Corresponding correlations were compared across sex groups using Fisher's *r*-to-*z* tests. Statistical significance was set at  $p < .05$ , and all tests were two-tailed.

## **Results**

### **Descriptive Statistics and Intercorrelations**

Figure 2 presents the Pearson correlation matrix among the study variables. The participants reported moderate levels of reactive aggression ( $M = 4.50$ ,  $SD = 3.46$ ), low levels of proactive aggression ( $M = 0.82$ ,  $SD = 2.02$ ), and moderate levels of aggressive behavior ( $M = 6.44$ ,  $SD = 5.33$ ). The mean score for anxiety/depression symptoms was also moderate ( $M = 6.23$ ,  $SD = 5.63$ ). Both maternal and paternal behavioral control were significantly and negatively correlated with adolescent aggression and behavioral problems. Specifically, the mother's control was negatively associated with proactive aggression ( $r = -.049$ ,  $p = .006$ ), aggressive behavior ( $r = -.040$ ,  $p = .024$ ), and delinquent behavior ( $r = -.060$ ,  $p = .001$ ). Similarly, the father's control was negatively associated with proactive aggression ( $r = -.067$ ,

$p = .001$ ), aggressive behavior ( $r = -.050$ ,  $p = .016$ ), and delinquent behavior ( $r = -.096$ ,  $p = .001$ ). Child disclosure was more strongly associated with various behavioral outcomes. Child disclosure to mother was negatively correlated with reactive aggression ( $r = -.072$ ,  $p < .001$ ), proactive aggression ( $r = -.11$ ,  $p < .001$ ), aggressive behavior ( $r = -.12$ ,  $p < .001$ ), anxiety/depression symptoms ( $r = -.056$ ,  $p = .001$ ), delinquent behavior ( $r = -.16$ ,  $p < .001$ ), and attention problems ( $r = -.11$ ,  $p < .001$ ). Child disclosure to the father followed a similar pattern, significantly correlating with reactive aggression ( $r = -.058$ ,  $p = .005$ ), proactive aggression ( $r = -.078$ ,  $p < .001$ ), aggressive behavior ( $r = -.085$ ,  $p < .001$ ), delinquent behavior ( $r = -.11$ ,  $p < .001$ ), and attention problems ( $r = -.11$ ,  $p < .001$ ).



**Figure 2.** *Pearson Correlation heatmap among the variables ( $n = 3,806$ )*

### Gender Differences in Aggression and Behavioral Outcomes

Before conducting the MANOVA, relevant assumptions were examined. Box's test of equality of covariance matrices was significant, and Levene's tests indicated unequal variances for several outcomes. Given the large sample size and the robustness of Pillai's Trace under violations of covariance homogeneity, Pillai's Trace was used as the primary multivariate statistic. The multivariate effect of sex was significant, Pillai's Trace = .065,  $F(6, 3799) = 44.38$ ,  $p < .001$ ,  $\eta^2 = .065$ , indicating that boys and girls differed across the combined behavioral outcomes. Follow-up univariate tests showed that boys reported significantly higher levels of PA,  $F(1, 3804) = 105.13$ ,  $p < .001$ ,  $\eta^2 = .027$ , and delinquent behavior,  $F(1, 3804) = 28.35$ ,  $p < .001$ ,  $\eta^2 = .007$ . Girls reported significantly higher levels of anxious/depressed symptoms,  $F(1, 3804) = 65.04$ ,  $p < .001$ ,  $\eta^2 = .017$ . Furthermore, girls showed slightly higher mean scores on attention problems and boys showed slightly higher mean scores on RA and aggressive behavior, though these differences were not statistically significant.

### Parental Control and Child Disclosure: Gender-Stratified Associations

Sex-stratified correlation analyses were conducted to examine how parental control and child disclosure were associated with adolescent behavioral outcomes among boys and girls separately (see Table 1). Corresponding correlations were then compared across sex groups using Fisher's  $r$ -to- $z$  tests. Maternal control was negatively associated with delinquent behavior among girls ( $r = -.084, p < .001$ ), whereas this association was not significant among boys ( $r = -.033$ ); however, the difference between these correlations was not statistically significant,  $z = 1.47, p = .141$ . Paternal control was negatively associated with PA ( $r = -.065, p = .024$ ) and delinquent behavior ( $r = -.073, p = .011$ ) among boys, and with aggressive behavior ( $r = -.088, p = .004$ ) and delinquent behavior ( $r = -.120, p < .001$ ) among girls. The corresponding sex differences were not statistically significant for paternal control with PA ( $z = -0.10, p = .921$ ), aggressive behavior ( $z = 1.63, p = .103$ ), or delinquent behavior ( $z = 1.13, p = .260$ ). Child disclosure showed more consistent negative associations with adolescent outcomes. Disclosure to mothers was negatively associated with most behavioral outcomes among boys and with all behavioral outcomes among girls. The association between disclosure to mother and aggressive behavior was significantly stronger among girls ( $r = -.173$ ) than boys ( $r = -.073$ ),  $z = 2.86, p = .004$ . The association between disclosure to mother and attention problems was also stronger among girls ( $r = -.150$ ) than boys ( $r = -.079$ ),  $z = 2.05, p = .040$ . For disclosure to fathers, girls showed significant negative associations with more behavioral outcomes than boys. The association between disclosure to father and aggressive behavior was significantly stronger among girls ( $r = -.134$ ) than boys ( $r = -.039$ ),  $z = 2.27, p = .023$ . Other corresponding sex differences in correlation magnitude were not statistically significant.

**Table 1**  
*Correlation Matrix of Studied Variables by Sex*

| Sex |     | Variable                  | M    | SD   | 1       | 2        | 3        | 4      | 5       | 6        | 7      | 8      | 9      |
|-----|-----|---------------------------|------|------|---------|----------|----------|--------|---------|----------|--------|--------|--------|
| M   | 1.  | Reactive Aggression       | 4.52 | 3.71 | -       | -        | -        | -      | -       | -        | -      | -      | -      |
|     | 2.  | Proactive Aggression      | 1.14 | 2.49 | .56**a  | -        | -        | -      | -       | -        | -      | -      | -      |
|     | 3.  | Aggressive Behavior       | 6.57 | 5.60 | .68**a  | .58**a   | -        | -      | -       | -        | -      | -      | -      |
|     | 4.  | Anxiety/Depression        | 5.50 | 5.28 | .54**a  | .37**a   | .66**a   | -      | -       | -        | -      | -      | -      |
|     | 5.  | Delinquent Behavior       | 2.47 | 2.45 | .56**a  | .66**a   | .69**a   | .51**a | -       | -        | -      | -      | -      |
|     | 6.  | Attention Problem         | 4.74 | 3.36 | .50**a  | .36**a   | .69**a   | .65**a | .53**a  | -        | -      | -      | -      |
|     | 7.  | Child Disclosure (Mother) | 16.8 | 3.74 | -.053*b | -.094**b | -.075**b | -.040b | -.13**b | -.081**b | -      | -      | -      |
|     | 8.  | Parent Control (Mother)   | 22.0 | 6.52 | -.012b  | -.040b   | -.033b   | -.001b | -.032b  | -.024b   | .36**b | -      | -      |
|     | 9.  | Child Disclosure (Father) | 16.1 | 3.50 | -.032c  | -.064*c  | -.039c   | -.034c | -.11**c | -.085**c | .57**d | .21**d | -      |
|     | 10. | Parent Control (Father)   | 21.3 | 6.42 | .007c   | -.064*c  | -.018c   | .009c  | -.072*c | -.028c   | .31**d | .63**d | .35**c |
| F   | 1.  | Reactive Aggression       | 4.48 | 3.17 | -       | -        | -        | -      | -       | -        | -      | -      | -      |
|     | 2.  | Proactive Aggression      | 0.49 | 1.31 | .41**e  | -        | -        | -      | -       | -        | -      | -      | -      |
|     | 3.  | Aggressive Behavior       | 6.31 | 5.03 | .66**e  | .43**e   | -        | -      | -       | -        | -      | -      | -      |
|     | 4.  | Anxiety/Depression        | 6.98 | 5.88 | .51**e  | .23**e   | .61**e   | -      | -       | -        | -      | -      | -      |
|     | 5.  | Delinquent Behavior       | 2.08 | 2.11 | .48**e  | .44**e   | .64**e   | .47**e | -       | -        | -      | -      | -      |
|     | 6.  | Attention Problem         | 4.92 | 3.39 | .49**e  | .28**e   | .67**e   | .66**e | .49**e  | -        | -      | -      | -      |

|     |                           |      |      |                      |                      |                      |                      |                      |                     |                    |                    |                    |
|-----|---------------------------|------|------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|--------------------|--------------------|--------------------|
| 7.  | Child Disclosure (Mother) | 17.6 | 3.83 | -.094** <sup>f</sup> | -.11** <sup>f</sup>  | -.17** <sup>f</sup>  | -.097** <sup>f</sup> | -.19** <sup>f</sup>  | -.15** <sup>f</sup> | -                  | -                  | -                  |
| 8.  | Parent Control (Mother)   | 22.8 | 6.22 | -.020 <sup>f</sup>   | -.045 <sup>f</sup>   | -.044 <sup>f</sup>   | -.027 <sup>f</sup>   | -.083** <sup>f</sup> | -.030 <sup>f</sup>  | .32** <sup>f</sup> | -                  | -                  |
| 9.  | Child Disclosure (Father) | 16.6 | 3.71 | -.086** <sup>g</sup> | -.082** <sup>g</sup> | -.13** <sup>g</sup>  | -.064* <sup>g</sup>  | -.105** <sup>g</sup> | -.14** <sup>g</sup> | .59** <sup>h</sup> | .21** <sup>h</sup> | -                  |
| 10. | Parent Control (Father)   | 21.9 | 6.38 | -.044 <sup>g</sup>   | -.058 <sup>g</sup>   | -.086** <sup>g</sup> | -.051 <sup>g</sup>   | -.12** <sup>g</sup>  | -.051 <sup>g</sup>  | .29** <sup>h</sup> | .61** <sup>h</sup> | .34** <sup>g</sup> |

Note. \* $p < .05$ . \*\* $p < .01$ . <sup>a</sup>  $n = 1,925$ . <sup>b</sup>  $n = 1,593$ . <sup>c</sup>  $n = 1,201$ . <sup>d</sup>  $n = 988$ . <sup>e</sup>  $n = 1,881$ . <sup>f</sup>  $n = 1,605$ . <sup>g</sup>  $n = 1,083$ . <sup>h</sup>  $n = 935$ .

## Discussion

This study explored the relationships among parental control, child disclosure, and adolescent aggression in a sample of middle school students in Hong Kong. By distinguishing between reactive and proactive aggression and considering both maternal and paternal parental control and child disclosure, this study provides a nuanced understanding of how familial factors influence adolescent behavioral outcomes. Although the findings largely support the hypotheses and align with those of previous studies, they also offer specific insights that highlight the complex interplay between parenting dynamics and adolescent aggression.

Consistent with Hypothesis 1, higher levels of maternal and paternal behavioral control were negatively associated with proactive aggression, aggressive behavior, and delinquent behavior. Specifically, maternal behavioral control showed a moderate negative relationship with proactive aggression, whereas paternal behavioral control demonstrated weak negative associations with both aggressive behavior and delinquent behavior. Furthermore, the correlations with reactive aggression were generally weaker and not statistically significant, suggesting that parental control may have a stronger influence on behaviors characterized by goal-directed aggression than on impulsive emotional responses (Gao et al., 2014; Masud et al., 2019). Indeed, reactive aggression often arises from internal processes such as frustration and emotional dysregulation rather than external parental constraints alone (Berkowitz, 1989; Crick & Dodge, 1994).

However, the expected same-gender dyadic pattern received only limited support. To illustrate, maternal behavioral control was associated with lower delinquent behavior among girls but not boys, whereas paternal behavioral control was associated with lower proactive aggression and delinquent behavior among boys and with lower aggressive behavior and delinquent behavior among girls. However, the direct comparisons of corresponding correlations did not provide consistent evidence that these associations were stronger in mother–daughter or father–son dyads. Thus, although the pattern of findings suggests that maternal and paternal control may relate to adolescent behavioral outcomes in somewhat different ways, the evidence does not support a strong conclusion that same-gender parent–child dyads are consistently more influential. These tentative dyadic patterns may still be understood in relation to prior work suggesting that mothers and fathers often occupy different roles in Chinese families, with mothers more involved in daily caregiving and fathers often assuming supervisory or authority-related roles (Shek, 2007). Therefore,

parental engagement strategies should consider both maternal and paternal roles, while avoiding overly rigid assumptions about same-gender parent–child influence.

In line with Hypothesis 2, adolescents’ disclosure to parents showed broadly negative associations with behavioral and emotional outcomes. These findings are consistent with previous theoretical perspectives and empirical evidence indicating that adolescents’ voluntary disclosure is an important source of parental knowledge and may be more informative than parent-driven monitoring or solicitation alone (Stattin & Kerr, 2000). However, the expected gender-specific pattern received only partial support. Disclosure to mothers was negatively associated with most outcomes among boys and with all outcomes among girls, suggesting that mother–adolescent communication may be particularly relevant to girls’ behavioral and emotional adjustment. Disclosure to fathers showed a similar pattern, with significant negative associations across more outcomes among girls than boys. Direct comparisons of corresponding correlations indicated that only selected disclosure–outcome associations differed by sex; therefore, the findings do not support a broad conclusion that disclosure is consistently more influential within same-gender parent–child dyads. Rather, the results suggest that adolescent disclosure may operate differently across mother–child and father–child relationships, with particularly consistent associations observed among girls. These patterns are broadly consistent with previous research suggesting that female adolescents may be more responsive to relational dynamics and emotionally supportive family communication (Álvarez-Voces & Romero, 2025; Chaplin & Aldao, 2013). Thus, adolescent behavioral health may be shaped not only by individual characteristics, but also by the quality of family communication and adolescents’ willingness to disclose personal experiences to parents.

Furthermore, Hypothesis 3 was partially supported. Boys reported significantly higher levels of proactive aggression and delinquent behavior than girls, which aligns with previous research indicating that boys are more likely to display instrumental aggression and externalizing behaviors (Fite et al., 2016). Conversely, girls reported significantly higher levels of anxious/depressed symptoms, consistent with previous studies showing that adolescent girls tend to experience higher levels of internalizing distress, including depressive and anxiety symptoms (Connor et al., 2003). The finding that the girls in this sample displayed more attention problems than the boys, although the difference was not significant, contrasts somewhat with global trends generally reporting higher attention deficit symptoms among males (Rucklidge, 2010). This divergence may reflect particular cultural or academic pressures unique to Hong Kong, where heightened academic demands and social expectations might amplify girls’ experiences of stress (Chyu & Chen, 2022).

### **Implications**

The findings of this study have important implications for adolescent behavioral health, in particular for developing preventive mental health strategies, informing policy and

477 school-based interventions, supporting counseling practices, and guiding early identification  
478 of problems through gender-sensitive interventions.

479  
480 First, the consistent protective role of child disclosure across a range of behavioral  
481 outcomes, including aggression, delinquency, attention problems, and anxiety and depression  
482 symptoms, emphasizes the need for preventive mental health strategies that strengthen family  
483 communication. Programs that aim to reduce adolescent behavioral health risks should focus  
484 on fostering open and voluntary disclosure from adolescents rather than on parental control  
485 only. Indeed, research has shown that child-initiated disclosure, especially when embedded in  
486 supportive parent–child relationships, is a more effective pathway for enhancing parental  
487 knowledge and regulating adolescent behavior (Catrin Finkenauer et al., 2024; Baudat et al.,  
488 2019). Promoting emotional safety and trust within the family context may therefore be a  
489 crucial target for behavioral health promotion.

490  
491 Second, the study provides practical insights for counselling and family-based  
492 intervention. The findings suggest that adolescents’ disclosure to parents is associated with  
493 fewer behavioral and emotional problems, but the evidence for same-gender dyadic patterns  
494 was mixed. Therefore, interventions should consider both adolescent sex and parent gender  
495 while avoiding rigid assumptions that mother–daughter or father–son relationships are always  
496 the most influential. For example, clinicians working with adolescent girls may consider  
497 strengthening communication with both mothers and fathers, given that disclosure to parents  
498 showed relatively consistent associations with girls’ outcomes. For boys, family-based work  
499 may focus on strengthening parental involvement, behavioral guidance, and opportunities for  
500 voluntary disclosure, particularly in relation to proactive aggression and delinquent behavior  
501 (Manuele et al., 2023; Temmen & Crockett, 2020). Such approaches may help families  
502 identify which parent–child relationship provides the strongest basis for communication and  
503 behavioral support.

504  
505 Third, this research highlights the importance of early identification and gender-  
506 sensitive programming in adolescent behavioral health. Consistent with the literature (Liu,  
507 2004; Fite et al., 2013), the study found that boys were more likely to exhibit externalizing  
508 behaviors such as proactive aggression and delinquency, whereas girls reported more  
509 internalizing symptoms and benefited more from emotionally supportive parental  
510 interactions. Therefore, screening tools and intervention strategies should be tailored to these  
511 distinct risk profiles. Schools and healthcare providers could consider implementing sex-  
512 sensitive screening and intervention pathways to enhance the precision and effectiveness of  
513 prevention efforts.

### 514 515 516 **Limitations**

517 Several limitations of the study should be acknowledged. First, the cross-sectional  
518 design restricts the ability to make causal inferences. Despite the observed associations, the  
519 directionality of the relationships cannot be determined. For instance, it is equally plausible  
520 that adolescents who are less aggressive feel more comfortable disclosing, rather than higher

levels of disclosure serving to mitigate aggression. Longitudinal designs are necessary to elucidate the temporal dynamics of these associations. Second, the relatively low internal consistency of the child disclosure scale ( $\alpha = .61$ ) necessitates cautious interpretation. The low alpha value suggests that the scale may not reliably capture the full spectrum of the child disclosure construct, potentially compromising the accuracy of the findings. Future research should consider refining the measure to enhance its reliability. Third, cultural norms and values may moderate the relationships between parenting behaviors and adolescent aggression. Consequently, although the findings are applicable within Hong Kong, their generalization to other settings should be approached with careful consideration.

### **Conclusion**

In conclusion, the current study highlights the distinct roles of parental control and child disclosure in shaping adolescent aggression. Although parental control may serve to deter proactive aggression, child disclosure appears to function as a more consistent protective factor across a range of behavioral outcomes. Gender-specific patterns further emphasize the need for nuanced, culturally sensitive approaches in parenting and intervention strategies. Ultimately, fostering open and trusting parent–child relationships may be key to mitigating both reactive and proactive aggression and enhancing overall adolescent behavioral health.

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